SDS

How To Use This Binder

This binder contains a **Quick Reference Guide** for fast emergency response, hazard identification, and chemical safety in the laboratory. It contains summarized safety data, immediate first-aid steps, exposure controls, and spill response procedures for chemicals stored and used in this facility.

Safety Data Sheets (SDS) and emergency response protocols for the chemicals: Ethyl Acetate, Glucose (Dextrose), Heparin, Hexane, Methanol, Sodium Citrate, and Sodium Thiosulfate are included

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EMERGENCY CONTACTS

Contact	Phone
Emergency Services / Fire / EMS / Police	911
TSTC Harlingen Campus Police	956-364-4220
Harlingen Fire Department	956-216-5700
TSTC Environmental, Health & Safety	956-364-4511
Poison Control	1-800-222-1222
Lab / Department Contact	_____
Building / Room	_____

QUICK RESPONSE GUIDE

🚨 FIRE / MAJOR CHEMICAL EMERGENCY

1. **Stop work immediately.**
2. Warn people in the immediate area.
3. **Evacuate the area/building when required.**
4. **Call 911** for an emergency.
5. Notify **TSTC Campus Police**.
6. Do not re-enter until authorized personnel give the **all-clear**.
7. Provide responders with the chemical name and **SDS**, if safely available.

🧪 CHEMICAL SPILL

Small spill — only if trained and authorized:

1. Alert people nearby.
2. Put on appropriate PPE.
3. Consult the chemical's **SDS Section 6 (Accidental Release Measures)**.
4. Use the appropriate spill-control procedure/materials.
5. Dispose of contaminated materials appropriately.
6. Report the spill according to laboratory procedures.

Large, unknown, highly hazardous, or uncontrolled spill:

1. **Do not attempt cleanup.**
2. Isolate/evacuate the affected area.
3. Notify appropriate emergency personnel.
4. Call **911** if there is immediate danger.
5. Contact TSTC Campus Police/EHS.

👁️ **CHEMICAL IN EYES**

1. Immediately flush eyes with water at the eyewash station.
2. Continue flushing according to the **chemical's SDS**.
3. Remove contact lenses if easily removable.
4. Seek medical attention as required.
5. Report the exposure.

🧤 **CHEMICAL ON SKIN**

1. Immediately flush the affected area with water.
2. Remove contaminated clothing while flushing as appropriate.
3. Continue decontamination according to the **SDS**.
4. Seek medical attention when required.
5. Report the exposure.

🫁 **INHALATION**

1. Move away from the exposure **to fresh air if safe to do so**.
2. Avoid entering a contaminated area without appropriate protection.
3. Seek medical attention according to the SDS.
4. Call **911** for serious symptoms or a life-threatening emergency.
5. Report the exposure.

☠️ **INGESTION**

1. **Do not induce vomiting unless specifically directed by medical personnel or the SDS.**
2. Check the chemical's SDS for specific first-aid instructions.
3. Contact Poison Control/medical professionals as appropriate.
4. Call **911** for a life-threatening emergency.
5. Have the chemical container/SDS available for responders if safely possible.

PPE & Spill Response Procedures

PPE Selection

- Review the chemical's **SDS Section 8 — Exposure Controls / Personal Protection** before use.
- Wear the PPE specified by the SDS for the chemical and task.
- Inspect PPE before use and replace damaged PPE.
- Remove contaminated PPE appropriately.
- Wash hands after handling chemicals.

General Spill Prevention

- Keep chemical containers closed when not in use.
- Use appropriate secondary containment when applicable.
- Keep incompatible chemicals separated.
- Keep work areas clean and uncluttered.
- Know the location of the spill kit before beginning work.

Spill Response

1. Assess

- Identify the chemical if it is safe to do so.
- Determine whether the spill is small and manageable or requires emergency assistance.
- Consult **SDS Section 6 — Accidental Release Measures**.

2. Small, Manageable Spill

- Alert people in the immediate area.
- Restrict access to the spill.
- Put on the PPE specified by the SDS.
- Prevent the spill from spreading.
- Use the appropriate spill-control materials.
- Collect cleanup materials in the appropriate waste container.

- Decontaminate the affected area as required.
- Report the spill according to laboratory procedures.

3. Large, Unknown, or Hazardous Spill

- **Do not attempt cleanup unless specifically trained and authorized.**
- Keep people away from the affected area.
- Notify your instructor/supervisor.
- Follow the laboratory emergency procedure.
- Contact emergency personnel when necessary.

SDS Quick Reference

ETHYL ACETATE

Quick-Reference SDS Summary:

Chemical: Ethyl acetate
CAS: 141-78-6
Example product: Sigma-Aldrich 270989
SDS revision: April 17, 2026
Signal Word: DANGER

⚠️ Main Hazards

- **Highly flammable liquid and vapor**
- **Causes serious eye irritation**
- May cause **drowsiness or dizziness**
- Repeated exposure may cause **skin dryness or cracking**.

🥽 PPE

- Protective **gloves**
- **Safety glasses/eye protection**
- Protective clothing as appropriate
- Use adequate ventilation; avoid breathing vapors.

🔥 Fire / Heat

- Keep away from **heat, sparks, flames, and hot surfaces**.
- Prevent static discharge.
- Vapors can form explosive mixtures with air.
- SDS lists **CO_2, foam, and dry powder** as suitable extinguishing media.

🚑 First Aid

Inhalation: Move to fresh air; seek medical attention if needed.

Skin: Remove contaminated clothing and rinse with water/shower.

Eyes: Rinse thoroughly with water; remove contact lenses if present; seek medical attention if irritation persists.

Swallowed: Give water as directed; consult a physician.

🖌️ Spill / Release

- Avoid breathing vapors.
- Provide ventilation.
- Eliminate ignition sources.
- Keep material out of drains.
- Absorb/collect the spill using appropriate absorbent material.

📦 Storage

- Keep **tightly closed**.
- Store **cool and well ventilated**.
- Keep away from ignition sources.
- Store as a **flammable liquid**.

Official SDS: https://www.sigmaaldrich.com/US/en/sds/sial/270989

GLUCOSE (DEXTROSE)

Quick-Reference SDS Summary

Chemical: Dextrose / D-(+)-Glucose
CAS: 50-99-7
Example product: Sigma-Aldrich G8270
SDS revision: Not listed in referenced PDF
Signal Word: None
GHS Classification: Not classified as hazardous

⚠️ Main Hazards

- The referenced SDS does **not classify the material as a hazardous substance or mixture**.
- No GHS hazard classification is assigned.

🥽 PPE

- Use normal laboratory protective practices.
- Avoid unnecessary contact.
- Wash hands after handling.

🔥 Fire / Heat

- The SDS identifies the material as **combustible**.
- Suitable extinguishing media include **water, foam, CO_2, and dry powder**.

🚑 First Aid

Inhalation: Move to fresh air.

Skin: Remove contaminated clothing and rinse skin with water/shower.

Eyes: Rinse with plenty of water; remove contact lenses if present.

Swallowed: Drink water; consult a physician if feeling unwell.

🧹 Spill / Release

- Collect spilled material using appropriate laboratory procedures.
- Clean affected area.
- Prevent unnecessary environmental release.

📦 Storage

- Store according to the **specific product's SDS and label**.

Official SDS/product source: https://www.sigmaaldrich.com/US/en/sds/sigma/g8270

HEPARIN

Quick-Reference SDS Summary

Chemical: Heparin sodium salt
CAS: 9041-08-1
Example product: Sigma-Aldrich H4784
SDS revision: Not listed in referenced PDF
Form: Powder
Signal Word: None / not classified as hazardous

⚠️ Main Hazards

- SDS states **not a hazardous substance or mixture** under its GHS classification.
- No known other hazards are listed.
- Toxicological information is limited; the SDS notes that its chemical, physical, and toxicological properties have not been thoroughly investigated.

🥽 PPE

- Standard laboratory PPE.
- Avoid unnecessary exposure.
- Use appropriate eye/skin protection.

🔥 Fire / Heat

- No special extinguishing-agent limitations are specified.
- Fire may produce **carbon oxides and nitrogen oxides**.
- Use appropriate firefighting equipment for the surrounding fire.

🚑 First Aid

Inhalation: Move to fresh air.

Skin: Remove contaminated clothing and rinse with water/shower.

Eyes: Rinse thoroughly with plenty of water.

Swallowed: Drink water and consult a doctor if feeling unwell.

🧹 Spill / Release

- Avoid generating dust.
- Prevent unnecessary exposure.
- Collect spilled material using appropriate laboratory procedures.

📦 Storage

The example product is listed with a recommended storage temperature of **2–8°C**.

Official SDS: https://www.sigmaaldrich.com/US/en/sds/SIAL/H4784

HEXANE

Quick-Reference SDS Summary

Chemical: n-Hexane / Hexane
CAS: 110-54-3
Example product: Sigma-Aldrich 139386
SDS revision: February 19, 2026
Signal Word: DANGER

⚠️ Main Hazards

- **Highly flammable liquid and vapor**
- May be **fatal if swallowed and enters airways**
- Causes **skin irritation**
- May cause **drowsiness or dizziness**
- Suspected of damaging **fertility or the unborn child**
- Prolonged/repeated inhalation exposure can damage the **nervous system**
- **Toxic to aquatic life with long-lasting effects**.

🥽 PPE

- Protective **gloves**
- Protective clothing
- **Eye/face protection**
- Use good ventilation.
- Avoid breathing vapors.

🔥 Fire / Heat

- Keep away from **heat, sparks, flames, and hot surfaces**.
- Prevent static discharge.
- Use **dry sand, dry chemical, or alcohol-resistant foam** for fire.
- Vapors can form explosive mixtures with air.

🚑 First Aid

Inhalation: Move to fresh air and seek medical attention if unwell.

Skin: Remove contaminated clothing and rinse with water/shower.

Eyes: Rinse thoroughly with water.

Swallowed: Immediately contact a Poison Center/doctor. Do NOT induce vomiting.

🧹 Spill / Release

- Eliminate ignition sources.
- Avoid breathing vapors.
- Ventilate area.
- Prevent environmental release.
- Collect spilled material appropriately.

📦 Storage

- Keep tightly closed.
- Store **cool and well ventilated**.
- Keep away from ignition sources.
- Store locked up as appropriate.

Official SDS: https://www.sigmaaldrich.com/US/en/sds/sigald/139386

METHANOL

Quick-Reference SDS Summary

Chemical: Methanol (Methyl alcohol)
CAS: 67-56-1
Example product: Sigma-Aldrich 179337, ACS reagent ≥99.8%
SDS revision: November 7, 2024
Signal Word: DANGER

⚠️ Main Hazards

- **Highly flammable liquid and vapor**
- **Toxic if swallowed**
- **Toxic if inhaled**
- **Toxic in contact with skin**
- May cause **organ damage**, including effects involving the **eyes and central nervous system**.

🥽 PPE

- Protective **gloves**
- Protective clothing
- **Eye/face protection**
- Adequate ventilation/fume hood
- Avoid breathing vapors.

🔥 Fire / Heat

- Keep away from **heat, sparks, flames, and hot surfaces**.
- Keep container tightly closed.
- Prevent static discharge.
- Use appropriate alcohol-resistant firefighting media.

🚑 First Aid

Inhalation: Move to fresh air and **seek immediate medical attention**.

Skin: Remove contaminated clothing, rinse thoroughly with water, and **seek medical attention**.

Eyes: Rinse thoroughly and seek medical/ophthalmic attention.

Swallowed: Immediate medical attention is required.

🧹 Spill / Release

- Eliminate ignition sources.
- Avoid breathing vapors.
- Provide adequate ventilation.
- Prevent material from entering drains.
- Use appropriate protective equipment and absorbent material.

📦 Storage

- Store **tightly closed**.
- Keep **cool and well ventilated**.
- Keep away from ignition sources.
- Follow flammable-liquid storage requirements.

Official SDS: www.sigmaaldrich.com/US/en/sds/sigald/179337

SODIUM CITRATE

Quick-Reference SDS Summary

Chemical: Sodium citrate tribasic dihydrate
CAS: 6132-04-3
Example product: Sigma-Aldrich S4641, ACS reagent ≥99.0%
SDS revision: July 30, 2025
Signal Word: None
GHS Classification: Not classified as hazardous

⚠️ Main Hazards

- SDS states **not a hazardous substance or mixture** under OSHA HCS.
- No other known hazards are listed.

🥽 PPE

- Standard laboratory PPE.
- Avoid unnecessary contact.
- Wash hands after handling.

🔥 Fire / Heat

- No special GHS fire hazard classification is assigned.
- Use appropriate extinguishing media for the surrounding fire.

🚑 First Aid

Inhalation: Move to fresh air.

Skin: Rinse skin with water.

Eyes: Rinse thoroughly with water.

Swallowed: Rinse mouth; seek medical advice if feeling unwell.

🧹 Spill / Release

- Collect spilled material using appropriate laboratory procedures.
- Clean affected area.

- Avoid unnecessary environmental release.

📦 **Storage**

- Store according to the manufacturer's product requirements.
- The example product is a **solid laboratory reagent**.

Official SDS: www.sigmaaldrich.com/US/en/sds/sial/s4641

SODIUM THIOSULFATE

Quick-Reference SDS Summary

Chemical: Sodium thiosulfate
CAS: 7772-98-7
Example product: Sigma-Aldrich 217263
SDS revision: September 8, 2024
Signal Word: None
GHS Classification: Not classified as hazardous

⚠️ Main Hazards

- SDS states **not a hazardous substance or mixture**.
- No GHS pictogram, signal word, hazard statement, or precautionary statement is required for this product.

🥽 PPE

- Standard laboratory PPE.
- Use appropriate eye and skin protection.
- Avoid unnecessary exposure.

🔥 Fire / Heat

- No special GHS fire classification is assigned.
- Use appropriate extinguishing media for the surrounding fire.
- Fire may generate hazardous decomposition products depending on conditions.

🚑 First Aid

Inhalation: Move to fresh air.

Skin: Wash with water.

Eyes: Rinse thoroughly with water.

Swallowed: Rinse mouth and seek medical advice if feeling unwell.

🧹 Spill / Release

- Avoid generating dust.

- Collect spilled material appropriately.
- Clean the affected area.

📦 **Storage**

- Keep container tightly closed.
- Store according to the manufacturer's product requirements.

Official SDS: https://www.sigmaaldrich.com/US/en/sds/sigald/217263

Inventory Log

Product Name (Exact Label)	Manufacturer / Supplier	Room / Cabinet Location	Last Received Date / Lot #	Quantity on Hand	Primary Hazard Class (GHS pictogram / NFPA rating if used)	SDS page/ tab location

Change Log

Date	Change Made	Changed By	Reviewed By

Training Records & Audit Log

Date	Name	Training / Review Topic	Completed By	Signature / Initials